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ABSTRACT

Perceptions of media violence and comparisons of those perceptions for different viewer subgroups were examined in a study of fifth-grade boys' perceptions of selected television scenes which differed in kind and degree of violence. Two parallel videotapes were edited to contain scenes of different kinds of physical violence, a practice scene, and two control scenes (nonviolent). Subjects were grouped as lower class white, lower class black, middle class white, and upper class white. The test instrument assessed degree of violence, acceptability of the behavior, liking of content, degree of arousal, and perceived reality. Data analysis included a factor analysis of test items, a comparison of subgroup differences in stimuli response, an examination of the differences in types of violence, and a check on relative perceptions of the control and experimental scenes. Boys from lower income families perceived violent scenes as more real and more acceptable, liked watching such scenes more, and liked watching all scenes more than middle class boys. Lower income blacks saw less violence in violent scenes than lower income whites; however, this may be an extension of the socio-economic difference, rather than a racial one. Scenes of violence with weapons were judged more violent than those without. (MT)

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Violence in the Media

SOCIAL CLASS AND RACIAL DIFFERENCES IN CHILDREN'S PERCEPTIONS OF TELEVISION VIOLENCE

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SOCIAL CLASS AND RACIAL DIFFERENCES IN CHILDREN'S PERCEPTIONS OF TELEVISION VIOLENCE

By

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February, 1971

Department of Communication

Michigan State University

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Questions concerning the effects of observing violent or aggressive behavior have been the focus of considerable attention. Investigators have ranged from social scientists to theologians to U.S. Senators. Much literature has examined the likelihood that a child will behave aggressively after viewing an aggressive model. Almost as plentiful are the reviews of the behavioral studies which attest to the quantity of work in this area (Flanders, 1968; Goranson, 1969; Weiss, 1969).

These inquiries are virtually void of empirical efforts to determine the meaning the stimulus has for the youngster or his attitudes toward such content. Defining what is "violent" or "aggressive" has been specified primarily by the researcher or commentator and use of these terms has differed widely. For example, Bandura (1963) contends that intent is an important element of aggression, whereas Buss (1961) holds that we must exclude intent and deal with behavioral acts. Where some investigators posit an aggressive drive (Kahn and Kirk, 1968), others argue for motivations (Epstein, 1962). At any rate, these explications are little concerned with the viewers' definitions or perceptions of the content.

Content analytic research on media violence which attempts to identify and count the types, degrees, and extent of violence in entertainment programing also generates a single-sided definitional scheme (Gerbner, 1969; Greenberg, 1969).

Weiss (1969) succinctly pointed out the lack of receiver-oriented studies of media violence in his recent review:

> "...there is a total lack of information concerning the subjects' definition of the experimental situations and the meanings or interpretations they gave to the movie or the behavior of the models, or concerning their reactions during the observation of the model or the movie. In the absence of such knowledge ... any facile assumption about the viewers' reactions and interpretations should be viewed with considerable caution."

He called for studies which would deal with perceptions of media violence and with comparisons of those perceptions from different sub-groups of viewers. Such studies, he contended, could yield important evidence necessary for more accurate interpretation and prediction of the effects of observing media violence.

The present study deals with these issues. Specifically, we examined young boys' perceptions of selected television program scenes which differed in the kind and degree of violence presented. The manner in which their attitudes toward a given vignette differed because of racial and socio-economic factors was a central study focus. The question became, how much, if any violence was judged to be present in the scene, how acceptable was the depicted behavior, and how did these perceptions vary among sub-groups of viewers?

Some laboratory experiments on perceptions of violence are pertinent to our study rationale. In those studies, the typical approach has been to use a stereoscope viewer to present a different image exposure for each eye. Through binocular fusion, these separate pictures merge. When presenting a violent image to one eye and a nonviolent image to the other, these studies have examined predictors of what is perceived.

Two major influences on what the individual sees have been isolated--the age and background of the viewer (Toch, 1961; Reif, 1967; Moore, 1966). For example, for children in grades 3-13, age is positively related to the tendency to perceive violence. More important to the present study is the evidence relating to the influence of the individual's background on his perceptions. Reif (1967), working with institutionalized male delinquents, found that those with a background of aggressive behavior and current aggressive habits perceived relatively little violence in his stereoscope experiments. They saw less violence than did delinquents without a history of aggressiveness, and/or without current aggressive tendencies. In other words, the youngsters most directly exposed to and involved with aggression were less likely to see the stimulus as violent.

The manner in which people become involved with violence appears to be critical in determining whether they see more or less violence. For example, professional critics of television see more violence in "violent" programs than does the general public (Greenberg and Gordon, 1970). Similar enhancement of or sensitivity toward seeing violence was found by Toch and Schulte (1961) in a study of police trainees. Those who had recently completed training were more prone to see violence in the stereoscope than were incoming trainees.

The present study contrasts this tendency to see violence by those who are being professionally trained and rewarded for doing so with those for whom violence has not been rewarding, but for whom it is more commonplace, e.g., Reif's delinquent boys. For the latter, given greater frequency of direct exposure to various forms of real-life violence, where seeing violence is not rewarded, the expectation is that less TV violence will be perceived. Further, when violence is judged to be present, there should be more moderate assessments of its intensity. Surely, gross acts of mayhem will be described as containing

some degree of violence, but the central issue is, "how much?"

Ample evidence indicates that physical aggression is a more commonplace aspect of the daily lives of youngsters from lower-class environments. In low-income homes, physical punishment as a mode of correction is used more frequently than verbal approaches (Sears, 1961; Chilman, 1965; Gans, 1962; Moles, 1965). As well, the environment outside the home is more likely to be hostile for the low-income child, especially if he lives in a ghetto area (Clark, 1965; U.S. Government, 1968).

This evidence contributes to the rationale that greater exposure to real-life aggression manifests itself in greater tolerance for aggressive behavior, whether real or mediated. The youngster who has been exposed to more aggression may become inured or sated by his more frequent exposures. For these reasons, the following hypotheses were tested:

H1: The less advantaged youngster will perceive less violence in a given segment of TV violence than will a middle-class youngster.

H2: The less advantaged youngster will judge mediated violence as a more acceptable mode of behavior than the middle-class viewer.

H3: The less advantaged youngster will see TV violence as being more real than his middle-class counterpart.

For parallel reasons, the less advantaged youngster should be more attracted to programs high in action and excitement, of which the violent programs are the principal ones available. Indeed, given the greater amounts of time such children spend with television (Greenberg and Dervin, 1970), such physical action may be necessary to arouse the viewer to attentitiveness. Thus, these hypotheses were tested:

H4: The less advantaged youngster will judge violence as more enjoyable to watch.

H5: The less advantaged youngster will testify to more self-arousal from TV violence.

Although we have just described the major emphasis of this study, in terms of rationale and hypotheses, certain sub-hypotheses were tested concurrently in terms of the weaponry of violence. Himmelweit, et. al. (1958) suggested that children watching violent programs are aroused to differing degrees, depending on the types of weapons involved. More recently, Berkowitz (1964) demonstrated a positive correlation between symbols of aggression, such as guns and knives, and the likelihood that aggressive behavior would be elicited in the presence of such symbols. Generalizing from these observations, we posited the following:

H6: Violent scenes with weapons will be perceived as more violent than violent scenes without weapons.

H7: Violent scenes with weapons will be perceived as less realistic than violent scenes without weapons.

METHODS

In general, pre-teen males were shown a variety of kinds of television violence, mingled with non-violent sequences. Testing was done in groups of four to six boys, in a room in their public school. Attitudinal responses were obtained in terms of several sets of verbal scale items. The background of the boys varied in terms of socio-economic status and race.

Video Materials

Twenty-three hours of prime-time television containing 24 programs were taped to obtain material representative of the array of television violence in current programming. All shows were taped between 7:30 and 11 p.m. over a three-week period, February 2 to 23, 1970. The complete set of programs is listed in Appendix 1. Programs taped were chosen on a priori expectations of

violent content if they were new this season and from previous data if from a returning series (Gordon, 1969).

From this recorded material, all individual violent sequences were edited onto a master tape. This 45 minute tape contained 75 separate scenes of violence which varied in length from 5 seconds to 120 seconds. All violent sequences were scenes in which characters physically harmed themselves or another person (e.g., hitting or shooting), overtly intended such harm (e.g., shooting but missing), or physically damaged some inanimate object (e.g., smashing furniture). Scenes of yelling or shouting were also recorded as examples of verbal aggression. The latter were so few as to preclude their further examination in this study.

In this sample of content, the three major types of physical violence evident were: property destruction, physical assault against others, and accidental or intended death.

Two scenes of violence were chosen for each of these three major types and two scenes of more idiosyncratic violence were included, a suffocation and a fire-death scene. Two stimulus tapes were created from these, adding practice and control scenes. Each version had one scene of each violence type, a fourth violent scene, the same practice scene, and the same two control scenes--for a total of seven scenes.

The violent scenes were randomly ordered onto one tape, and the second version constructed with a parallel order. Order of presentation was then constant for all subjects. Capsule descriptions of the scenes in each version are presented in Figure 1 in their order of appearance. More complete descriptions are in Appendix 2.

FIGURE 1

Stimulus Tapes

VERSION 1	VERSION 2
Practice: Kidnappers chase a young woman through the woods and catch her.	
Violence: An angry man smashes lamps and furniture.	Violence: An angry woman smashes a car with a baseball bat.
Control 1: A boy and dog stroll slowly into a wooded area.	
Violence: A speeding car driven by a felon crashes and bursts into flames.	Violence: A young woman is suffocated then dropped out a third-story window.
Violence: A shotgun blast hurls a man and debris across a desk.	Violence: A killer points a pistol in a man's face and pulls the trigger.
Control 2: Motorcycle riders travel down a dirt road.	
Violence: A man has a fist fight with an intruder.	Violence: A man has a fist fight with an intruder.

Subjects

All subjects came from public schools in Kalamazoo and Grand Rapids, Michigan. In each city, the superintendent's office designated each school in the system as primarily containing pupils from upper, middle, or lower-class families, and provided racial census data. Schools were then selected which provided adequate numbers of subjects in these economic and racial categories: Lower-class white, lower-class black, middle-class white, and upper-class white.

In all schools, fifth-grade boys were used. Parental permission slips were distributed, and less than a dozen non-permission slips were received. This yielded 325 fifth-graders for the data analysis: 89 black lower-class, 89 white lower-class, 90 middle-class, and 57 white upper-class boys.

Instrumentation

The test instrument was designed to assess the subjects' evaluation of the stimulus scenes along five specific attitudinal dimensions. These a priori dimensions dealt with how much, if any, violence was perceived in each scene, how acceptable the demonstrated behavior was judged to be, how much the subject enjoyed viewing each content segment, how realistic the content was perceived to be, and how much self-arousal was felt. These dimensions were developed to correspond to the hypotheses stipulated earlier.

An early form of the instrument was pretested, with the same content segments, on 60 students in a different public school system. In addition, public school teachers were asked to evaluate procedures, forms, and wording. Findings and suggestions were incorporated into the final instrument.

Three items were constructed for each of the five attitudinal dimensions, and the same 15 items were used for all seven stimulus scenes. Here are sample items for each dimension:

Degree of Violence
Was what you saw.....
____Extremely Violent
____Very Violent
____Pretty Violent
____Not Very Violent

Acceptability of the Behavior
Is it.....
____Very Right For People To Be This Way
____A Little Right
____Not Very Right
____Not Right At All For People To Be This Way

Liking of the Content
Was what you saw a show like
____You Really Like To See
____You Sometimes Like To See
____You Don't Like To See Very Much
____You Don't Like To See At All

Degree of Arousal
What you saw was.....
____Not Very Exciting
____A Little Exciting
____Very Exciting
____Extremely Exciting

Perceived Reality
What you saw was..... ____ Very Much Like Real Life
____ Pretty Much Like Real Life
____ Not Much Like Real Life
____ Not At All Like Real Life

The complete set of items is in Table 1 of the results section, together with data on the empirical verification of the dimensions.

Procedures

Testing was conducted in April and May, 1970. Each school provided a room large enough for the video tape equipment and for 4-6 children seated in front of a TV set. Group size was limited so that each subject would be close to the 21-inch screen and interaction among them would be minimal.

The boys were told that we wanted their reactions to scenes from regular TV programs, that this was not a test and would in no way affect their classroom evaluation. They made no personal identification on the instrument. Booklets were coded for race and version after the boys left the viewing room.

Subjects first viewed the practice scene. The experimenter completed two or three items with them to clarify how they were to proceed. The boys completed the remaining items for the practice scene and were questioned as to difficulties with words or procedures. When they understood the items and procedures, each child was asked if he wished to continue. Of 329 subjects used, four declined to continue. The subjects were then shown the six remaining scenes, and rated each scene immediately after viewing it. On the average, it took 25-30 minutes to view and rate all seven scenes.

Upon completion, the boys were asked not to talk to their classmates about what they had done until everyone had participated. Teachers did not discuss the childrens' experiences with the class until testing in that school was completed.

RESULTS

Four major analyses were completed: (1) a factor analysis of the test items, (2) a comparison of racial and social class differences in response to the stimuli, (3) an examination of differences between kinds of violence, and (4) a check on relative perceptions of the control and experimental scenes. Results are presented in that order.

Item Analysis

Three test items were designed to tap each of five attitudinal dimensions. To determine if the a priori allocation of items to these categories had empirical support, item responses were intercorrelated and then submitted to a principal axis factor analysis with varimax rotation. A summary of the factored results is in Table 1.

This procedure yielded three major factors and a minor one. One major factor was that of perceived Violence in the stimuli. Four items loaded primarily on this factor and accounted for 17 percent of the total variance. Three of the items had been designated as violence perception items. The fourth dealt with the judged seriousness of the stimuli.

A second major factor was perceived Acceptability. The three items originally constructed for this dimension loaded together and explained 17 percent of the total variance.

The third major factor was professed Liking for the scenes. Five items loaded on this factor and accounted for 25 percent of the total variance. These included the three items designed for this dimension, plus two items originally conceived of as arousal indices--feelings of laughing and the funnyness of the scenes. For these subjects, the latter two perceptions were part of their overall liking of the TV content. No arousal factor emerged.

TABLE 1

Factor Items

			% Total Variance
Factor 1. Perceived Violence			17%
ITEMS:		Item Loadings	
Were the people.....	____Not Very Angry ____A Little Angry ____Very Angry ____Extremely Angry	...	.64
Was what you saw.....	____Not Very Violent ____Pretty Violent ____Very Violent ____Extremely Violent	...	.58
Was what you saw.....	____Not Very Serious ____A Little Serious ____Pretty Serious ____Very Serious	...	.71
Was what you saw.....	____Not Very Cruel ____A Little Cruel ____Pretty Cruel ____Very Cruel	...	.58
Factor 2. Perceived Acceptability			17%
ITEMS:		Item Loadings	
Is it	____Very Right For People To Be This Way ____A Little Right ____Not Very Right ____Not Right At All For People To Be This Way	...	.84
Was what you saw.....	____A Very Good Thing To Do ____A Pretty Good Thing ____A Pretty Bad Thing ____A Very Bad Thing To Do	...	.82
Is it.....	____Very Nice For People To Act Like This ____Pretty Nice ____Not Very Nice ____Not Nice At All For People To Act Like This	...	.81

TABLE 1 (cont.)

Factor Items

		% Total Variance
Factor 3. Professed Liking		25%
ITEMS:		Item Loadings
What you saw was.....	____A Very Good Thing To Watch ____A Pretty Good Thing ____A Pretty Bad Thing ____A Very Bad Thing To Watch	... .77
What you saw was.....	____A Very Funny Thing To See ____A Pretty Funny Thing ____A Pretty Sad Thing ____A Very Sad Thing To See	... .77
Was it.....	____A Wonderful Show ____A Pretty Good Show ____A Pretty Bad Show ____A Terrible Show	... .80
Does what you saw....	____Make You Feel Like Laughing A Lot ____Make You Feel Like Laughing A Little ____Not Make You Feel Like Laughing Very Much ____Not Make You Feel Like Laughing At All	... .70
Was what you saw a show like...	____You Really Like To See ____You Sometimes Like To See ____You Don't Like To See Very Much ____You Don't Like To See At All	... .79

Factor 4. Perceived Reality.....		7%
ITEM:		Item Loadings
What you saw was.....	____Very Much Like Real Life ____Pretty Much Like Real Life ____Not Much Like Real Life ____Not At All Like Real Life	... .87

The following items were too impure to assign to a single factor:

What you saw was.....	____Not Very Exciting ____A Little Exciting ____Very Exciting ____Extremely Exciting
Was what you saw.....	____Very Much For Fun ____Pretty Much For Fun ____Not Very Much For Fun ____Not For Fun At All

The fourth factor was but a single item assessment of the perceived Reality of the content. Two items had impure loadings and were omitted from subsequent analyses. These four factors accounted for 66 percent of the total variance. In summary, where we posited five factors in the original instrument, including arousal and reality factors, three strong factors--perceived violence, acceptability and liking--emerged from the factor analysis.

Social Class and Racial Differences

The study rationale hypothesized that attitudinal responses to the TV violence would order from upper and middle-class white males to lower-class white, to the single group of lower-income black males tested. Basically, class difference responses were predicted, with the single racial comparison expected to intensify such differences.

For each of the four dimensions of judgement, item scores were summed. Given two versions of the experimental stimuli,[1] and the repeated measures within each version a Friedman two-way analysis of variance by ranks was used to test the perception hypotheses across the eight scenes of violence (Siegel, 1956). In addition, sub-analyses for each factor: (1) compared the group ratings within each violent scene, (2) compared ratings across the groups for all violent scenes collapsed, (3) compared the combined lower-class groups with the combined middle and upper-classes and (4) compared the scene ordering within each factor. Violent scenes are compared with non-violent scenes in a subsequent section.

Perceived Violence. Table 2 presents the mean values of perceived violence. Across the four groups, the analysis of variance by ranks identified one major difference in perceptions of the eight violent scenes. From the sum of ranks, the origin of

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[1]Each of the four scenes of violence in the first content version was tested against its counterpart scene in the second version. This was done for each of the four attitudinal dimensions. By t-tests, 9 of the 16 pairs of means were significantly different. This precluded any collapsing of the two versions and the analyses maintain this distinction.

TABLE 2

PERCEIVED VIOLENCE[1]

Scene:[2]	Social Group: Black Lower	White Lower	White Middle	White Upper
Pistol Killing**	12.10 (1)	14.15 (4)	13.73 (3)	13.32 (2)
Shotgun Killing	12.76 (1)	13.29 (2)	13.33 (3)	13.39 (4)
Suffocation Killing	12.35 (1)	13.29 (3)	13.35 (4)	13.19 (2)
Death by Fiery Car Crash	12.35 (1)	13.04 (3)	13.43 (4)	12.92 (2)
Smashing Car	11.95 (1)	13.27 (4)	13.17 (3)	12.77 (2)
Fist Fight #1**	11.18 (1)	13.21 (3)	13.95 (4)	13.04 (2)
Fist Fight #2**	10.85 (1)	12.42 (2)	12.73 (4)	12.48 (3)
Smashing Furniture*	10.96 (1)	12.10 (2)	12.33 (3)	12.73 (4)
Sum of Ranks:	(8)	(23)	(28)	(21)
		(X^2r = 16.35, $p<.001$)		
Mean ratings across scenes:	11.81	13.08	13.25	12.98

[1]The larger the mean, the more violence; the higher the rank, the more violence.

[2]Mean differences for individual scenes significant by one-way analysis of variance: *$p<.05$; **$p<.001$.

this difference was the viewer's race. The black-lower class group saw significantly less violence across all scenes ($p<.001$).

The sub-analyses confirmed this interpretation, First, in a one-way analysis of variance among the four class levels for each scene, four scenes produced significant differences (see asterisks in Table 2). In each case, the difference was due primarily to lesser perceived violence by the black lower-class respondents.

Second, the eight violent scenes were collapsed and a one-way analysis of variance was computed across the four class-race group means (bottom row of means in Table 2). The groups differed significantly, the variation due primarily to the lower ratings of the black lower-class group ($p<.001$).

Third, using these collapsed means, the combined lower classes were compared to the combined middle and upper-classes by t-test. The results were significant, with the lower-class boys seeing less violence ($p<.01$).

Ordering the scenes by degree of perceived violence, the Kendall coefficient of concordance was computed to determine how similarly the four groups ordered the 8 scenes. The result was a .52 correlation among the four groups in ordering the scenes ($X^2 = 14.59$, df=7, $p<.05$). Table 2 lists the scenes from most to least violent. Most violent were the pistol and shotgun killings; least violent were the fist fight and furniture-smashing scenes.

Perceived Acceptability. Table 3 presents the data for this attitude factor. The analysis of variance by ranks was significant across the four groups for the eight violent scenes ($p<.001$). The difference was one of both economic class and race, with race accentuating the income difference. In six of the eight violent scenes, the lower-class boys said the behaviors they observed were more acceptable; in seven of eight, the black youths were more extreme in acceptance.

TABLE 3

PERCEIVED ACCEPTABILITY[1]

Scene:[2]	Social Group: Black Lower	White Lower	White Middle	White Upper
Fist Fight #2***	7.85 (1)	9.44 (2)	9.85 (3)	10.19 (4)
Smashing Furniture	9.29 (1)	9.79 (2)	10.50 (4)	10.00 (3)
Fist Fight #1***	8.94 (1)	9.98 (2)	10.83 (4)	10.31 (3)
Death by Fiery Car Crash**	9.78 (2)	10.60 (3)	11.00 (4)	9.77 (1)
Smashing Car***	9.68 (1)	10.63 (2)	10.96 (4)	10.68 (3)
Shotgun Killing*	10.25 (1)	10.42 (2)	11.41 (4)	10.46 (3)
Pistol Killing***	9.93 (1)	10.78 (2)	11.46 (4)	11.23 (3)
Suffocation Killing***	9.68 (1)	11.37 (3)	11.69 (4)	11.32 (2)
Sum of Ranks:	(9)	(18)	(31)	(22)
		(X^2r = 18.75, p<.001)		
Mean ratings across scenes:	9.44	10.36	10.96	10.53

[1]The larger the mean, the less acceptable the content; the higher the rank, the more acceptable.

[2]Mean differences for individual scenes significant by one-way analysis of variance: *p<.05; **p<.01; ***p<.001.

Sub-analyses supported this interpretation. First, in seven of eight scenes the four groups were significantly different by one-way analysis of variance (see asterisks in Table 3). In each case, the variation was based on economic/race differences. Second, the analysis of variance across the groups for the collapsed scene means in Table 3 was consistent with the latter result ($p<.001$).

Third, comparing the combined lower-class subjects with the combined middle and upper-classes demonstrated an income difference ($p<.001$). Thus, the lower-class youngsters found the behavior in the scenes more acceptable, and this was even more so for the black disadvantaged boys.

Ordering the scenes by degree of acceptability, the correlation among the four groups was .75 ($X^2 = 20.97$, df=7, $p<.01$). Table 3 lists the scenes from most to least acceptable. Overall, the behavior in the furniture smashing and fist fight scenes was perceived as more acceptable. The killing scenes were least acceptable.

Professed Liking. Table 4 contains the mean ratings in terms of how much the scenes were enjoyed. Here, the rank order analysis of variance was marginally significant and emphasized an income difference ($X^2 = 5.74$, df=3, $p<.10$). The lower-class boys, both black and white, liked watching the violent scenes somewhat more than the middle and upper-class boys.

As a further check on this finding, the sub-analyses were done. A one-way analysis of variance for each scene showed that two of the eight scenes were significantly different across groups (see asterisks in Table 4). This difference represented higher levels of liking by the lower-class groups, principally the lower-class blacks. Second, the eight violent scenes were collapsed and a one-way anova was computed for the group means in Table 4. This test yielded the same economic difference interpretation ($p<.05$). Third, the combined lower-class means were compared to the combined middle- and upper-class means by

TABLE 4

PROFESSED LIKING[1]

Scene:[2]	Social Group: Black Lower	White Lower	White Middle	White Upper
Smashing Furniture	10.33 (2.5)	9.48 (1)	10.33 (2.5)	11.08 (4)
Fist Fight #2*	9.68 (1)	10.51 (2)	11.23 (3)	12.26 (4)
Fist Fight #1**	9.45 (1)	11.04 (3)	13.05 (4)	11.00 (2)
Smashing Car	11.93 (3)	10.78 (1)	11.38 (2)	12.52 (4)
Death by Fiery Car Crash	12.82 (2)	14.06 (4)	13.88 (3)	12.50 (1)
Shotgun Killing	13.12 (1)	14.17 (4)	14.07 (3)	13.19 (2)
Pistol Killing	14.30 (2)	14.02 (1)	14.81 (3)	15.10 (4)
Suffocation Killing	14.98 (2)	14.51 (1)	15.38 (3)	15.48 (4)
Sum of Ranks:	(14.5)	(17) (X^2r = 5.74, p<.10)	(23.5)	(25)
Mean ratings across scenes:	12.01	12.31	13.03	12.97

[1]The larger the mean, the less liking; the lower the rank, the less liking.
[2]Mean differences for individual scenes significant by one-way analysis of variance: *p<.05; **p<.001.

t-test. The more disadvantaged boys professed to like the violent content more than their counterparts ($p<.01$), and again, race intensified that distinction.

The scenes in Table 4 are listed in the order of liking, from most to least. The correlation among the orderings of the scenes by the four groups was .88 ($\chi^2 = 24.50$, df=7, $p<.001$). Overall, the furniture smashing and fighting scenes were most liked; the killing scenes were least liked.

Perceived Reality. Table 5 summarizes the results for this attitude dimension. It is well to recall that this dimension, consisting of a single item, was not a strong attitudinal component, as constructed. The analysis by ranks was marginally significant, but maintained the income distinction ($p<.10$). With perceived reality, race did not intensify the perception differences.

Sub-analyses were also less stable for this factor. For no single scene, nor by examining the means collapsed across scenes, was a statistically significant difference obtained. The difference between means for the combined lower-classes vs. the combined middle- and upper-classes was marginally significant ($p<.10$). Overall, there was partial support for the notion that perceptions of reality vary by income level. The lower-class boys saw the violent scenes as being somewhat more like real life than did the more advantaged youngsters.

Table 5 orders the scenes by amount of perceived reality, from most to least. The coefficient of concordance for similarity of order patterns across the groups was .70 ($\chi^2 = 19.66$, df=7, $p<.01$). Here, the fist fight scenes were seen as being most real, and the killing scenes among the least real.

In summary this analysis of racial and social class differences supports these propositions: (1) black lower-class youngsters saw less violence in a given "violent" scene than did all, white, socio-economic groups; (2) the

TABLE 5

PERCEIVED REALITY[1]

Scene:	Social Group: Black Lower	White Lower	White Middle	White Upper
Fist Fight #2	1.88 (1)	1.93 (2)	2.19 (4)	1.97 (3)
Fist Fight #1	1.84 (1)	2.08 (3)	2.19 (4)	1.96 (2)
Smashing Car	2.10 (3)	1.85 (1)	2.08 (2)	2.13 (4)
Shotgun Killing	2.10 (2.5)	2.04 (1)	2.10 (2.5)	2.23 (4)
Pistol Killing	2.40 (4)	2.17 (2)	2.33 (3)	2.16 (1)
Death by Fiery Car Crash	2.02 (1)	2.33 (2)	2.60 (4)	2.42 (3)
Suffocation Killing	2.43 (4)	2.20 (1)	2.40 (3)	2.32 (2)
Smashing Furniture	2.22 (1)	2.46 (2)	2.55 (4)	2.50 (3)
Sum of Ranks:	(17.5)	(14)	(26.5)	(22)
		($X^2r = 6.64$, $p<.10$)		
Mean ratings across scenes:	2.12	2.14	2.30	2.20

[1]The larger the mean, the less like real life; the lower the rank, the less like real life.

lower-class boys, both white and black, saw various forms of violent behavior as being more acceptable than did the middle- and upper-class white youths; (3) the lower-class youngsters enjoyed watching the "violent" scenes more; and (4) the disadvantaged boys tended to see the violent scenes as "more like real life."

There also was substantial agreement among the classes as to scene ordering for all four factors, exceeding .70 for the acceptability, liking and reality factors. This overall ordering similarity enabled examination of the minor hypothesis that weapon-induced aggression would be considered more violent than non-weapon aggression. Two tests were made from the available data. First, the violence ratings for the pistol and shotgun killing scenes were compared to the combined ratings of the two fist fight scenes. Second, all eight violent scenes were classified as either weapon or non-weapon scenes and the two sets compared. In both comparisons, the difference was significant, as predicted ($p<.001$).

The sub-hypothesis that no-weapon scenes would be seen as more real than weapon scenes was tested in the same manner. The no-weapon scenes headed the perceived reality scale and the differences were consistent ($p<.01$).

Violent vs. Non-Violent Scenes

The violent (experimental) scenes and the non-violent (control) scenes were compared to examine the relative perceptions of the two for the four viewing factors. These data are in Table 6, in terms of collapsed mean values for the violent and nonviolent scenes. The two were compared by correlated t-tests. The table also presents the results of a one-way analysis of variance across groups for the experimental and control scenes.

These particularly nonviolent scenes were rated less violent, more acceptable, and more liked by each of the four social class/race groupings. That

TABLE 6

Mean Judgments of Control and Experimental Scenes*

		Black Lower	White Lower	White Middle	White Upper	F	P
Violence	C	7.38	6.55	5.77	6.27	10.15	.001
	E	11.81	13.08	13.25	12.98	9.58	.001
Acceptability	C	6.43	6.08	6.13	6.08	1.17	N.S.
	E	9.44	10.36	10.96	10.53	15.80	.001
Liking	C	9.60	9.56	10.38	9.44	2.80	.05
	E	12.01	12.31	13.03	12.97	2.59	.05
Reality	C	2.04	1.90	2.07	2.05	0.95	N.S.
	E	2.12	2.14	2.30	2.20	1.03	N.S.

*The larger the mean the:
-more violence
-less acceptability
-less liking
-less reality
C=Control (non-violent scenes); E=Experimental (violent scenes).

is, for each of the first three rows in Table 6 the paired means in each cell are significantly different beyond the .001 level. The reality factor differences were less stable; all but the black youngsters perceived the violent scenes as significantly less real. However, the choice of control scenes was arbitrary, and these findings of differences between the experimental and control scenes do not follow from any theoretical propositions. Although it was expected that the control scenes would be rated less violent consistently, perceptions of liking, reality, etc., could vary greatly with the kind of less violent scenes used as controls.

More importantly, the data in Table 6 enable us to examine whether the obtained social class/race differences in perception of violent content are different than those youngsters' perceptions of any other kind of TV content. This is, if the more disadvantaged youngsters saw less violence, more acceptability, etc. in the control scenes as well as the experimental scenes, then the stated findings could be highly artifactual. They could be totally the result of a response set to television, and not predicated on the background characteristics.

The data disconfirm such a view. The means for the control scenes do not have the same pattern as in the experimental scenes. Examining the two sets of means for the violence ratings, the lower-class youths, particularly the black, actually judge the control scenes as more violent than do the middle-class youngsters ($p<.001$). For the other three dimensions, there is no consistent class or race pattern evident for the control scenes. Therefore, this evidence suggests that the alternative explanation of a generally different response set or threshold judgment difference may be rejected.

SUMMARY

This study examined differences in perception of TV violence as they related to social class of the viewer, his race, and the content of the scene.

By social class, boys from low-income families differed from their middle-class counterparts in that the former perceived the behavior in violent scenes as more acceptable, saw violent scenes as more like real life, and liked watching the violent scenes more.

By race, low-income blacks differed from low-income whites in that the former saw less violence in scenes of violence.

Scenes of violence with weapons were judged as more violent and less real than weaponless scenes.

In addition, the more disadvantaged youngsters liked watching all scenes, violent or not, more so than their comparison group. Yet their lesser perceptions of violence in the more violent scenes was not offset by lesser judgments of violence in the less violent scenes.

In accord with another hypothesis, middle-income boys saw more violence in no-weapon scenes, However, since they saw more violence in general, this is a minor finding.

DISCUSSION

The data clearly support several propositions about the impact of class-environment on the predispositions of these young viewers toward televised violence. Less clear is the extent to which a racial difference exists beyond the economic one. The analyses do separate further the black, low-income youngsters from their white peers. The former see even less violence, find it more acceptable and like watching it more. But there remains an impression that the black respondents were a level or two further down the economic scale than their white counterparts. Individual income data were not obtained and

this notion cannot be tested more directly in this study. If the blacks were even more disadvantaged, then perceptual differences reported here as extended by race may be an intensification of the class-income variable. The data are equivocal on that specific issue. Studies underway examine this question directly.

Earlier studies isolated age and background as important variables in the perception of violence (Toch, 1961; Reif, 1967; Moore, 1966). A recent television survey (Greenberg and Gordon, 1970) supported these experimental findings, pointing out that men perceived less violence across a set of "violent" programs than did women. It is argued here that what makes age and environment important are the related socialization experiences. For example, men learn to deal with aggression or to be aggressive differently than women. Physical aggression is a more commonplace mode of behavior for men; verbal aggression may be the balancing tool for women, but of the latter, we know little.

Combining the variables of age, sex and family social class in a single paradigm may illustrate better the present approach and begin to specify needed research.

A | male / ... / female | who is of | preschool / teen / adult | age and whose background or upbringing has been | lower-class / ... / middle-class | which | facilitates / ... / minimizes | exposure to or experience with violence will perceive | less / ... / more | violence in a given television scene.

In relation to the effects question, these elements may be thought of as "what the individual brings to the medium". For example, the present evidence shows that the pre-teen from a lower-class background, which increases exposure

to violent behavior, will perceive low violence in a violent TV scene. If he is black, he probably perceives even less violence. Far less is known about other combinations of these factors; very little about other kinds of media effects.

Recall that those who saw the violent scenes as less violent saw the nonviolent scenes as more violent, while in another study, men saw more violence in nonviolent programs than did women. As a plausible explanation, we propose that if an individual's environment is hostile, with violence a frequently occurring behavior, his accommodation to that setting results in his seeing a given incident of violence as less intense. Yet, at the same time, toward the less violent end of the judgment continuum, there is a more than average tendency to see some violence or hostility. Two thoughts occur. One, the experiences of the disadvantaged youngster predispose him to see some hostility in everything, though not as much, and not with the same degree of differentiation as more general norms would indicate. Or perhaps, the violence judgment dimension is just not as readily used. We argue the former, inasmuch as the more hostile background and environment of the youngster predisposes a more aggressive, violent outlook toward society.

Such an outlook should be reflected in the youngster's attitude toward violence or his willingness to advocate the use of violence in a given situation. Dominick and Greenberg (1970), looking specifically at attitudes toward aggression, found a relationship between the extent to which there were clear family norms concerning violent behavior and the likelihood that a child would advocate using violence in a specific situation. Where norms were lacking, the child was more favorably inclined toward aggressive behavior. The family norm related to how effective the child perceived violence to be as a mode of conflict resolution,

which in turn was correlated with his exposure to TV violence. For both the middle- and lower-income boys, violence was perceived to be maximally effective when TV exposure was high or family attitudes toward violence were unclear.

This study of attitudes toward violence suggests that the child's attitude toward violence will reflect his willingness to behave aggressively. Research concerning attitudes toward aggression is intermediate between determining a child's exposure to and perceptions of mediated violence and his subsequent behavior. Perceptions of violence may not coincide with attitudes toward aggression, but one has little basis for suspecting otherwise.

To the extent these linkages exist, the current research may be related to prior experimental work on aggression and imitation. Berkowitz (1962) has specified several factors which will influence the likelihood that a person will behave aggressively. Once the relationships between exposure, perception, attitude, and behavior are more fully understood, they may be tied to such factors as Berkowitz proposed. Figure 2 is a preliminary step in that direction.

The number of variables presented emphasizes the complexity of the issue. Surely, research of a multi-variable nature is required to identify the more important variables and to eliminate the lesser contributors to the behaviors examined. Some variables are manipulable, others may be unchangeable. Knowing responses to mediated violence among specifiable and major sub-groups of the audience is apparently critical to the general question of effects.

Beyond this, inferences become even more speculative. If indeed, as evidence shows, the more disadvantaged are more aggressive in attitude and experience, and this aggressiveness is strongly reinforced through a steady exposure to TV fare of their choosing, and if few counter-aggression messages are received from family, peers, or other socializing agencies, then the consequences are of paramount social importance.

FIGURE 2

Maximizing Conditions for Aggressive Behavior

Take a [male / female] who is of [preschool / teen / adult] age and whose background or upbringing has been [lower-class / middle-class] which [facilitates / minimizes] exposure to or experience with violence. [Insult / Frustrate / Don't frustrate] that person and expose him to [high / low] violence or aggression by someone [like / unlike] himself which is [justified / unjustified] and [rewarded / punished]. Then, place the person in a situation which is [similar / dissimilar] to the media setting and in which [uninhibiting / inhibiting] norms are functioning. As a result, the individual will perceive [low / high] violence and will exhibit [high / low] aggressive behavior.

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APPENDICES

APPENDIX 1

Taped Programs

DAY	TIME	NET	SHOW	DURATION
Sunday	7:00	CBS	Lassie	1/2 hr.
"	7:00	ABC	Land of the Giants	1 hr.
"	8:00	ABC	FBI	1 hr.
"	9:00	NBC	Bonanza	1 hr.
"	10:00	NBC	The Bold Ones	1 hr.
"	10:00	CBS	Mission Impossible	1 hr.
Monday	7:30	CBS	Gunsmoke	1 hr.
"	7:30	ABC	It takes a Thief	1 hr.
Tuesday	7:30	CBS	Lancer	1 hr.
"	7:30	ABC	Mod Squad	1 hr.
"	10:00	ABC	Marcus Welby	1 hr.
Wednesday	7:30	NBC	Virginian	1 1/2 hrs.
"	9:00	CBS	Medical Center	1 hr.
"	10:00	CBS	Hawaii Five-O	1 hr.
"	10:00	NBC	Then Came Bronson	1 hr.
Thursday	7:30	NBC	Daniel Boone	1 hr.
"	8:30	NBC	Ironsides	1 hr.
"	9:30	NBC	Dragnet	1/2 hr.
"	10:00	ABC	Paris 7000	1 hr.
Friday	7:30	CBS	Get Smart	1/2 hr.
"	8:30	NBC	Name of the Game	1 1/2 hrs.
"	10:00	NBC	Bracken's World	1 hr.
Saturday	8:30	NBC	Adam-12	1/2 hr.
"	10:00	CBS	Mannix	1 hr.
			Total time	23 hrs.

APPENDIX 2

Scene Descriptions

First Scene (Practice--same for both versions): A girl is being held captive by two men in a remote cabin. The girl breaks free and runs into the woods. The men chase her from different directions. Rapid cutting builds an air of suspense until one man, laughing, jumps from behind some bushes and grabs the startled girl, face-to-face in a bear hug. (Taken from "The FBI"--1 min. 5 sec.)

Second Scene (Version One): In a plush business office an angry man in a business suit confronts two other business men. The angry man begins shouting and smashing furniture with his bare hands, as the other men look on in dismay. (Laugh track deleted from test scene. Taken from "Get Smart"--21 sec.)

Second Scene (Version Two): In the early morning quiet of a city street, a woman in robe and with hair in curlers approaches a car parked near a bar. Shouting about her no-good drunkard husband she begins smashing the glass and fenders of the car with a baseball bat. A police car approaches, two policemen get out and subdue the woman. (Taken from "Adam-12"--25 sec.)

Third Scene (Control--same for both versions): A boy and dog walk slowly past some adobe houses. Peaceful music accompanies them as they stroll into a wooded area in the shadows of late afternoon. (Taken from "Lassie"--25 sec.)

Fourth Scene (Version One): In the large stately house, a man glares at a group of his peers. In admission of his guilt he screams, "All right, I did it, I killed her." A friend tries to stop him as he runs from the room and is knocked to the floor. Running from the room, he pushes a button to open the huge iron gates to the manor, jumps in his car and speeds off. Through a malfunction, the gates fail to open and the car crashes into the gates and bursts into flames. (Taken from "Name of the Game"--37 sec.)

Fourth Scene (Version Two): A burglar, in the bedroom of a sleeping young woman, is trying to remove a photograph from a glass frame. The frame slips and crashes to the floor, wakeing the woman. The burglar takes a pillow and forces it over the woman's face. With her limp body in his arms, he walks to the third-story bedroom window and drops her out. (Taken from "Paris 7000"--23 sec.)

Fifth Scene (Version One): A man with sawed-off shotgun cautiously peers around the corner in a corridor. Satisfied, he steps out, takes careful aim and pulls the trigger. Inside a glass-walled office a man is sitting behind a desk with his back to the assassin. The blast hurls the man, flying glass and debris across the desk. He ends up sprawled on the floor. (Taken from "Hawaii Five-O"--15 sec.)

Fifth Scene (Version Two): In a crowded parking lot, a man is preparing to drive away from a social gathering. Guests are standing on a nearby porch with drinks in hand. As he approaches a gate, a car pulls through the gate and stops, blocking the exit. Annoyed, he honks his horn and hollers at the guy to "move it". The second man gets out, walks around his car, pushes a pistol in the first man's face and pulls the trigger. The guests' heads turn in slow motion to the roll of a harp. (Taken from "The Bold Ones"--20 sec.)

Sixth Scene (Control--same for both versions): A man opens the door of his female companion's apartment and escorts her inside. As he turns to close the door a second man hits him on the head, knocking him dazed to the floor. The intruder grabs the girl and she struggles to get free. Regaining his senses, the woman's companion jumps on the intruder and a fist-fight starts. In attempting to escape, the intruder's path lies along a long scatter rug which his pursuer pulls. Losing his footing, the intruder crashes to the floor, striking his head and is unconscious. (Taken from "Paris 7000"--37 sec.)

Seventh Scene (Version Two): In a stylish middle-class apartment, the private eye holds a gun on the villain as he questions him. The villain relates that the action will take place at a specific hour. As the private eye glances at his watch the villain knocks the gun away and a fist-fight starts. Crashing over the furniture, the lamps are knocked out and the fight continues in semidarkness. The private eye hits the villain into a semi-conscious state, grabs the gun, and holds him at bay. (Taken from "Mannix"--35 sec.)